

## (S//REL) Statistics Configuration Read Me

(S//REL) Statistics configurations are stored in two locations: `xks.config` and `xks.advanced.config`. Some of the configurations are only available on systems running versions of XKEYSCORE prior to version 1.5.10. These are noted in the description of each configuration. Follow these steps to change the statistics configurations.

### `xks.config`

1. (S//REL) At the command line from within any directory, type `vi config` and press Enter. The `xks.config` file will open. There are three statistics configurations:

a. `stats_connect_to` =

- i. *Version*: 1.5.9 and prior
- ii. *Default*: no value
- iii. *Description*: Identifies the hostname of the system that collects statistics on a cluster. If this value is blank, statistics will be collected on the master. This configuration has been used in cases where a cluster is split into a front end and a back end, in which case the master of the back end usually collects and sends statistics to `stats_central`.
- iv. *Action*: Keep the default (no value) to use the hostname of the master of the cluster. Or, type the specific hostname of a machine on which statistics should be collected.

b. `stat_system_designator` =

- i. *All Versions*
- ii. *Default*: no value
- iii. *Description*: Identifies the system for which statistics are being collected by appending a unique name to the SIGAD of the system.
- iv. *Action*: Keep the default value if the system has one cluster. If the system has *multiple* clusters, then type a unique name for each cluster. For example, type `xkey1` for one cluster and `xkey2` for another cluster. A single entry is made for each cluster that is named:

```
stat_system_designator{0} = xkey1,  
stat_system_designator{1} = xkey2, etc.
```

Classified By: [REDACTED]

Derived From: NSA/CSSM 1-52

Dated: 20070108

Declassify On: 20370901

- c. `send_stats_home = yes`
  - i. *All Versions*
  - ii. *Default:* no value
  - iii. *Description:* Confirms that statistics files will be created. Delivery of these files to stats\_central is completed using MAILORDER or some other site-specific file transfer mechanism.
  - iv. *Action:* Keep the default to have statistics files created. Type `no` if the current system is to be used as a statistics database/viewer or if statistics should not be collected.
- 2. (U//FOUO) Make any desired changes to the configurations.
- 3. (S//REL) Type `:wq!` and press `Enter` to exit *xks.config*.

#### **xks.advanced.config**

- 1. (S//REL) At the command line from within any directory, type `viadvanced` and press `Enter` to edit the *xks.advanced.config* file. There are five statistics configurations:
  - a. `stats_central = no`
    - i. *Default:* no
    - ii. *All Versions*
    - iii. *Description:* Determines if the current system is to be used as a stats database/viewer. This system cannot be used for processing and must have statistics files routed to it via MAILORDER.
    - iv. *Action:* Keep the default if you do not want the system to be the stats database/viewer. Type `yes` if you want the current system to be used to display metrics.  
  
**Important:** There is a comment about this parameter in *xks.config.in*, but the configuration should be set here. Setting the value in *xks.config* will override the value in *xks.advanced.config*.
  - b. `stats_dest_trigraph = XKJ`
    - i. *Default:* XKJ
    - ii. *All Versions*
    - iii. *Description:* Identifies the trigraph used when creating statistics MAILORDER files.  
  
**Note:** This configuration is transparent to the system at site. However, if site administrators want to send stats to stats-central using a trigraph other than XKJ, then this must be coordinated with MAILORDER.



- iv. *Action:* Keep the default for data to be sent to stats\_central using trigraph XKJ. Type a different trigraph to route data elsewhere.

c. stats\_input\_topics =

- i. *Default:* no value
- ii. 1.5.9 and prior *only*.
- iii. *Description:* Identifies which statistics are collected by the system.

**Note:** This option is present in xks.advanced.config but it is ignored in version 1.5.9.

- iv. *Action:* Keep the default value to ensure all default statistics are collected. Do not change unless otherwise directed by an XKEYSCORE developer.

d. mp\_stats = false/true

- i. *Default:* false or no value for version 1.5.9 and prior; true for version 1.5.10.
- ii. *Version:* 1.5.9 and prior
- iii. *Description:* Directs the XKEYSCORE process to collect generic\_info\_stats.
- iv. *Action:* Type true to collect generic\_info statistics using the API stats call (xks::inc\_stat). Type false to ignore generic\_info statistics.

**Note:** you can use the send\_mp\_kw\_stats command line argument to direct XKEYSCORE to collect microplugin and keyword statistics.

e. mp\_stats\_interval = 900

- i. *Default:* 900 seconds
- ii. *Version:* 1.5.9 and prior
- iii. *Description:* Sets the collection interval for the microplugin statistics. Any value (in seconds) may be entered.

**Note:** This is no longer in the config file, but it is still honored.

- iv. *Action:* Keep the default value unless otherwise directed by an XKEYSCORE developer.

3. (S//REL) Type :wq! and press Enter to exit xks.advanced.config.

## Key Terms

*Cluster:* A single Master and 0 to  $n$  Slaves. A system may have front-end and/or back-end clusters. Front-end clusters perform raw packet collection and back-end clusters perform protocol processing.

*Master:* A single machine that runs the XKEYSCORE software and distributes the configuration to all Slaves in its cluster. At a site with multiple systems and an Overlord, the Master receives its configuration from its Overlord.

*Overlord:* A single machine that runs the XKEYSCORE software and controls the clusters in a complex system. It passes configuration files to the individual Masters.

*Site:* A single SIGINT Activity Designator (SIGAD). A site may contain 1 to  $n$  systems.

*Slave:* A single machine running the XKEYSCORE software that receives its configuration from its cluster Master.

*System:* One to  $n$  clusters and 0 or 1 overlord.